Return 40 c

S-E-C-R-F-F

19458
19458
REVEW PROGRAM
INTER
CIA HISTORICAL REVIEW PROGRAM
INTER
CIA HISTORICA REVIEW PROGRAM
INTER
CONTRIBUTATUR PROGRAM
INTER
CONTRIBUTATUR
CONTRIBUTATUR
CONTRIBUTATUR
CONTRIB

INTELLIGENCE MEMORANDUM

OUTLOOK FOR AGRICULTURAL PRODUCTION IN THE SINO-SOVIET BLOC 1955

CIA/RR IM-412

15 July 1955

WARNING

THIS MATERIAL CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, USC, SECS. 793 AND 794, THE TRANSMISSION OR REVELATION OF WHICH IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

CENTRAL INTELLIGENCE AGENCY

Office of Research and Reports

S-E-C-R-E-I

2

BLANK PAGE

S-E-C-R-E-T

FOREWORD

This memorandum is a preliminary analysis of the condition of growing crops in the Sino-Soviet Bloc. It is based on information available as of 15 June 1955. As a qualitative statement, it reflects the prospects for the food supply of the Bloc for the consumption year from 1 July 1955 through 30 June 1956. It should be noted that Sino-Soviet Bloc crops are in the making and that the final outcome will depend on developments during June and July. Should weather conditions fluctuate, the food situation in the Bloc would become worse or improve correspondingly. After the weather conditions during June and July are known, a further statement on crop conditions will be issued -- probably in September -- and will be followed later by estimates of quantitative production based on acreage as well as yield.

The memorandum also indicates the general effect that pressures exerted by current governmental programs and policies may have on agriculture developments in the Sino-Soviet Bloc.

The USSR and China sections of this memorandum have been coordinated, with the Department of Agriculture.

BLANK PAGE

S-E-C-R-E-T

CONTENTS

			Page
Sur	nmary	у	1
I.	USS	SR	2
	A. B. C.	General	2 3 6
		1. General	6 9 11 13
II.	Eur	opean Satellites	14
	A. B.	General	14 15
		7 Rumania	15 16 17 18 20 21
	С.	Outlook for Agricultural Production	23
III.	Comm	munist China	25
		Appendix	
Sour	rce F	References	2G



OUTLOOK FOR AGRICULTURAL PRODUCTION IN THE SINO-SOVIET BLOC*

Summary

Crop prospects in the Sino-Soviet Bloc indicate that agricultural production in the Bloc will not rise substantially above the mediocre 1954 levels. Although the agricultural outlook in the USSR is somewhat more favorable than it was in June of 1954, the European Satellites face another year of below-normal food availability, and Communist China's agricultural production will be no better than it was in 1954, a year of near starvation in many areas.

In the USSR the failure of the "new course" to raise agricultural production led Soviet officials to launch two rather hazardous programs -- the expansion of grain acreages on "new lands" in which both soil and climate conditions are marginal and the expansion of corn acreages in the Ukraine and in other areas of the USSR not well suited to the production of corn.

The first program involves an increase in 1955 of about 16 million hectares, seeded largely to spring wheat and millet. It is probable that this new acreage will increase the 1955 gross production of grain above the prewar average, but on a per capita basis grain availability will remain below that of the prewar base year 1938-39.

The second program raises the corn acreage in 1955 to almost 17 million hectares, a nearly fourfold expansion over the 1954 corn acreage. Production from the additional acreage will increase supplies of grain and fodder somewhat, but unless weather conditions are unusually favorable during June, July, and August, the effect of this increase on the average per capita availability of meat, milk, and other livestock products during 1955-56 will not be large.



^{*} The estimates and conclusions contained in this memorandum represent the best judgment of ORR as of 15 June 1955.



The European Satellites are facing the prospect of another belownormal harvest for 1955, with no hope of improving food availabilities over the poor 1954-55 food consumption year. Adverse weather conditions affecting crop growth are primarily responsible for the unfavorable outlook for agricultural production.

The factors necessary to help alleviate the effects of adverse weather -- improved agrotechnics, mechanization, fertilization, and the peasant's incentive to raise agricultural production -- have not materialized under the "new course." The present policy of continuing to socialize agriculture will continue to depress production as it has in the past.

In Communist China, drought conditions reported throughout most of the country threaten the harvest of early rice crops in the south and winter wheat crops in the north. Unless there are above-normal fall harvests in 1955, the planned 6-percent increase in the production of food crops over the low levels of 1954 may not be attained.

Because the Chinese Communists have failed to meet planned goals of food production during the first 2 years of the current Five Year Plan (1953-57), they have found it necessary to revise their 1957 goals downward. An additional plan failure in 1955 probably will result in harsher rural policies. These policies would be necessary in order for the regime to fulfill its industrial and export requirements for agricultural products through increased procurements from the countryside.

I. USSR.

A. General.

Unless seriously unfavorable drought or other conditions develop before the harvest is completed, the USSR will garner somewhat more grain in 1955 than in 1954. The prospects as of 15 June indicate that small-grain yields will average higher than those of 1954. There are also

S-E-C-R-E-T

indications of an increase of some 16 million hectares, 1/* largely spring wheat and millet, on new lands. There has been, furthermore, an increase of at least 12.5 million hectares of corn, 2/ chiefly to produce silage. The corn crop got a late start, and conditions for early growth in the Ukraine and the North Caucasus areas were not favorable. It is therefore improbable that the contributions made by corn as grain will add materially to the advances made by small grains. Although the quantity of grain produced in the USSR in 1955 may exceed the prewar production of 1938, it is improbable that per capita availability of grain will reach the prewar level.

There has been a small increase in sugar beet acreage, and production of sugar in 1955 may exceed the low 1954 level, but the increase will not be sufficient to affect per capita availability materially.

Cotton has run into difficulties this year. Cold weather killed sprouting plants and necessitated considerable replanting in certain important areas. Danger from insect pests is also reported. The 1955 cotton production may be expected to be about the same as that of 1954.

Soviet officials are stressing the need for increase of livestock numbers and productivity. The corn expansion program is directed toward this end. The program initiated this year, if successful, cannot be expected to increase to any material degree the availabilities of meat, milk, and other livestock products during the 1955-56 consumption year.

B. Weather and Crop Conditions.

On the basis of information available as of 1 June 1955, Soviet crop prospects for the current year are judged to be relatively favorable. As yet there are no indications of droughts such as plagued the Ukraine and the Volga area in the summer of 1954. The new lands area of West Siberia and Kazakhstan had favorable fall and winter precipitation, but the spring rainfall has been somewhat less than that of 1954.

^{*} For serially numbered source references, see the Appendix.

S-E-C-R-E-T

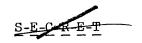
In the fall of 1954, most of the USSR had relatively favorable weather for the sowing and growth of fall-sown grains for harvest in 1955. There were, however, some areas in the southern Ukraine and North Caucasus where rainfall was light -- a continuation of the 1954 summer drought. Temperatures were above normal in most areas, the first frosts coming much later than they did in the fall of 1953. The plan for seeding fall-sown grains was reported to have been overfulfilled by October 10. 3/ A slight increase in the total acreage of fall-sown grains was also reported. 4/

na sinang

The precipitation for the winter months was normal or above normal for almost all areas of the USSR, some of the major grain areas receiving especially favorable amounts. There have been several recent Soviet press articles referring to the favorable fall and winter precipitation in portions of the new lands area of West Siberia and Kazakhstan. 5/ The only winter kill report to date has come from an observer in Moscow who indicates that "severe winter kill of fall-sown grains was noted along the route traveled in the western oblasts of the central black-soil region. Many fields were being partly or entirely replanted to spring grains." 6/

March precipitation was generally somewhat below normal in the southern half of the European USSR and in some areas of the region of grain expansion in West Siberia and northern Kazakhstan. In April the rainfall in most areas was greater than it had been during the previous month. Most of the important agricultural areas of the European USSR received near-normal or above-normal precipitation. In the new lands area of West Siberia and Kazakhstan, wide variations in precipitation continued through April, and many stations in Kazakhstan reported belownormal rainfall. It should be noted, however, that even normal precipitation in this area in March and April is scanty. Rainfall and temperature in May, June, and July are far more crucial in determining crop yield potential.

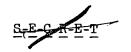
Rainfall data for May are incomplete, but preliminary estimates indicate relatively light precipitation in some regions of the Ukraine, the North Caucasus, and the new lands area of West Siberia and northern Kazakhstan. In early May there were press reports from two regions of the new lands area urging that spring sowing be done promptly because warm steppe winds were rapidly drying the soil. 7/



Field work in the Transcaucasus this spring began almost a month earlier than in the spring of 1954. 8/ In much of the USSR, however, spring field work was delayed by cold weather. In the cotton-growing regions of Central Asia the cold weather necessitated some replanting of cotton, and in the central and northern regions of the European USSR there were complaints about delays in spring seeding. In May, however, considerable progress in the sowing program apparently was made. In a speech at the All-Union Conference of Industrial Workers on 18 May, Khrushchev stated: "Despite the fact that spring is late this year, spring sowing is progressing considerably better than last year. By May 15 the collective and state farms had sown 16.3 million more hectares to grain than by the same. date in 1954." 9/ Later in the same speech, Khrushchev commented on the moisture situation: "Climatic conditions in most districts this year are good, and there is sufficient moisture everywhere. Should no unforeseen circumstances arise -- however, nature often acts unexpectedly -- there is every reason to expect a good harvest this year." 10/ In mid-June, Khrushchev reported that the total sown area on collective and state farms had increased 21 million hectares over 1954. 11/

During the first half of May, observers in Moscow made a trip through part of the Ukraine and reported crop conditions "mostly good to excellent," soil moisture being marginal or slightly submarginal in the southern Ukraine but not yet causing serious crop damage. Preliminary indications are that the southern Ukraine received light to moderate rainfall during the latter part of May. Preliminary estimates indicate light rainfall in May for the North Caucasus area, but any shortage probably was offset by above-normal rainfall in the previous month of April. In the new lands area of Siberia and Kazakhstan, spring rainfall appears to have been generally below that of last spring, and there are indications that in May the rainfall was relatively light in many of the areas of expansion of spring wheat and millet.

Considering the USSR as a whole, the June and July weather has assumed greater importance this year than in previous years because the wheat crop in the new lands area passes through its critical stages of development at a later date than does that of the traditional wheat areas of the USSR, and because corn, the 1955 acreage of which has been increased by more than three times the acreage of 1954, requires substantial rainfall and warm weather if it is to develop satisfactorily.



C. Outlook for Agricultural Production.

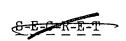
1. General.

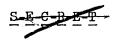
During the past 25 years the USSR has been unable to increase its agricultural production to keep pace with its expanding population. The present consumption level, in terms of average per capita food availability, is below that of the later years of the precollectivization period.

Within the last year and a half, Soviet leaders have gambled on the successful development of two projects: (a) the seeding of crops -largely spring wheat and millet -- on 28 million to 30 million hectares
(70 million to 75 million acres) of new crop land eastward from the Volga
River and through southern Siberia and northern Kazakhstan, where farming
is highly precarious, and (b) the expansion of the acreage of corn into
areas not well suited to growing corn and particularly not suited to
the production of corn as grain. Other crops much better adapted for
growing in the latter area, both for silage and grain, are available.

The USSR is faced with four major problems related to food supply:

- a. Population is increasing at the rate of about 3 million a year, and it will require ever-increasing amounts of extra food to feed the populace, even at the present low levels of consumption.
- b. The people in the city and country alike -- particularly the rapidly growing numbers of industrial workers -- need more meat, milk, and butter to maintain efficiency.
- c. Food supplies withdrawn from stocks during both 1953-54 and 1954-55, when the USSR was forced by poor crop yields to dip into reserves to meet home needs, must be replaced.
- d. The USSR may require large tonnages of grain for export to exchange for other types of goods. In the past, Tsarist Russia exported as much as 10 million tons of grain a year.





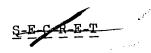
At first glance the tremendous land area of the USSR would not suggest that lack of land in itself could be a cause of continuing agricultural problems. The crucial point, however, is the fact that climatic features of one sort or another place critical limitations on the profitable use of a large part of this land mass.

In the US a mountain range intervenes between the best farming areas and the western deserts. In the USSR there is no barrier between the Asiatic desert and the farm lands of northern Kazakhstan, West Siberia, the Volga drainage basin, the North Caucasus, and the Ukraine. Grain and other crops may flourish in the spring only to be withered by hot desiccating winds sweeping across the Caspian Sea, up the Volga River, or north into the region east of the Ural Mountains. Later in the season, cold air from the Arctic may flow southward, bringing rain or even snow at harvest time into the northern European USSR, West Siberia, and northern Kazakhstan. Grain often rots in the field before it can be harvested.

Despite these and other natural limitations on land resources, it seems certain that the USSR could provide food for many more millions of people at present levels of consumption and could possibly raise food consumption, both quantitative and qualitative, to even higher levels. The failure to attain such goals has been, to a very large extent, the result of the system under which Soviet agriculture has been forced to operate, with its attendant inefficiencies and general policy of complete unconcern for the plight of the peasant.

The morale of the Soviet peasant is low, and under the collective farm system there is little incentive for farmers to exert themselves to more than the minimum of effort. It is difficult to conceive of any very rapid increase in agricultural production until adequate incentives have been provided.

The primary incentives at present apply only to the Communist officials who are in control. They live better than their fellows, they have more privileges, and they enjoy power and prestige of a type.

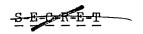


Beginning in the fall of 1953, the collective farmers were granted some so-called material incentives, including somewhat higher prices for produce sold, tax adjustments, the reduction of some delivery quotas, and money advances during the year, and -- most recently -- a portion of the corn crop has been promised as an inducement for proper planting and harvesting of the crop. To date, however, there appears to have been no significant change in the peasants' lack of enthusiasm for the collectivized system.

The operation of collective farms theoretically is in the hands of the collective farmers themselves, but actually there has been a tremendous amount of high-level centralized planning, and the farm operations have been under the indirect, or even direct, influence of local party and government officials. In March 1955 a decree was issued calling for more local initiative and less detailed central direction. In subsequent months the government has insisted on a swift implementation of this decentralized planning program which, on paper at least, delegates greater responsibility to local officials. This insistence on a rapid shift toward decentralized planning has led to further confusion during a season which even normally is busy and rather confused.

In April 1955 a decree was issued which, in effect, called for the replacement of one-third of the present collective farm chairmen with workers from the Party, local government offices, and economic enterprises. The large-scale turnover of farm chairmen probably is aimed at removing not only incompetents but also those chairmen not completely loyal to the present agricultural program. The new chairmen will take over their new duties after a training period of only 2 to 6 months. Because many of the replacements will have primarily urban backgrounds, it is likely that there will be further organizational confusion, creating another major hindrance to increasing current agricultural output.

It is true that agriculture in the USSR has been mechanized, but although mechanization has released manpower for the development of industry, it has not as yet given to agriculture the definite benefits that have been achieved in the US.



2. "New Lands" Program.

One of the means by which Soviet authorities hope to increase agricultural output is by extending production to virgin and abandoned lands.* Nothing so gigantic in the field of agricultural expansion has been attempted before by the USSR or, probably, by any other nation. This "new lands" program envisages expanding by 1956 the total Soviet sown area by about 20 percent, an area larger than the total sown area of Canada.

This new area will be seeded to "grain and other crops." As much as 90 percent may be in spring wheat, and most of the remainder will probably be seeded to millet. It does not follow, however, that increasing breadgrain production is the only aim of the program. Although some increase in the breadgrain area will result, the expansion of the wheat acreage on the new lands may permit a decrease of the acreage in breadgrains on the old lands and permit the expansion of acreage and output of feed grain, vegetable crops, roughages for livestock, industrial crops, and the like. In principle, these shifts are rational. If the Soviet government could rely for a large part of its breadgrain procurements on the sparsely populated areas of Siberia and Kazakhstan, it could ease its pressure on collective farms in old areas to deliver grain. The government must be aware that its procurements took too large a share of grain production, that consequently not enough was left on the farms to feed animals or peasants, and that sometimes the pressure on supplies was such that not enough remained for seeding.

Khrushchev has stated that more grain is needed for better feeding of the people and animals as well as for reserves and export. There can be little difficulty in demonstrating the need for greater production. The Soviet leaders are placing great reliance on the "new lands" program to satisfy this need.

^{*} It should be noted that the good lands -- that is, those lands that have been found profitable to cultivate -- are already under cultivation.

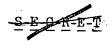
In this program there is something which is new in degree, if not in kind, in agricultural policy in the USSR. It must be borne in mind that in the USSR most of the major pronouncements previously made about agricultural policy changes have led to little or no substantive change. This "new lands" program, however, is being implemented at a fairly rapid rate with the necessary inputs -- labor, machinery, petroleum, and transportation.

Two kinds of statements are frequently made that imply that the "new lands" program is likely to fail. First, it is argued that two decades ago much of this land was plowed and seeded without success. Second, it is stated that the climate fluctuates so greatly around a relatively low level of moisture availability that crop failure will occur at least 2 years out of 5.

In the last two decades there have been substantial improvements in power machinery and equipment that make it possible to farm areas that could not have been farmed earlier. The success of the "new lands" program, as far as mechanization is concerned, depends on the degree of effectiveness with which hastily trained mechanics can operate machines that are unfamiliar and are difficult to keep in adjustment.

The success or failure of the "new lands" program may also depend more on the average long-term yields that the USSR will consider acceptable than on fairly frequent crop failures. This new lands area is a relatively small part of the total cultivated area of the USSR. If the USSR follows Joseph's Egyptian policy and erects facilities for storing grain during the "fat" years, it may be possible to maintain workers in the area despite two or more consecutive years of crop failure -- provided the average long-term yield is high enough.

If this program is maintained, it is bound to make some contribution to the wheat and millet supply of the USSR -- but at a high cost. Soviet officials may decide, nevertheless, thus to augment production even though the program is highly uneconomical. It may be found that the combined resources cost of a net yield of 4 centners per hectare (about 6 bushels per acre) in the new areas may be as high as or even higher than that of an 8-centner yield in the old areas.



Khrushchev has been quoted as saying that the "new lands" program will break even with average yields no higher than 4.8 centners per hectare. For official planning purposes, however, yields of 10 centners per hectare have been used.

In view of the inputs being placed on the new lands and the top-level backing the whole program is receiving, it is difficult to believe that the project will be quickly abandoned or even seriously curtailed in the event of a serious crop failure.

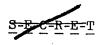
Preliminary studies indicate, however, that natural limitations, particularly climate, may interfere with the long-term success of the "new lands" program.

3. Corn Program.

The Soviet plan calls for an increase in corn acreage from 3.5 million hectares in 1953 to 28 million hectares by 1960. The increase amounts to 60 million acres, about two-thirds of the total corn acreage of the US. For the most part, the proposed acreage lies in an area having growing conditions similar to those in the northern half of Wisconsin and Minnesota and in northern South Dakota. Hence any expansion will have to occur in an area where the climate and soils are relatively unfavorable for corn. Furthermore, only a small part of the acreage can be relied upon to produce grain.

Khrushchev proposes to plant almost one-third of the total planned corn acreage on land formerly sown to other grain crops, mostly oats and barley. The remainder of the corn is to be planted on land formerly sown to other fodder crops, root crops, and grasses; on pastures and abandoned land; and also, presumably, on summer fallow land. There is a strong probability that the replacement of other grains by corn will have an adverse effect on total grain production.

Compared with other grains, corn requires more knowledge and care on the part of the producer and involves a much greater expenditure of labor, machinery, and fertilizers. In most countries it has been found that the risks are less and the rewards greater in producing other grains on what in the case of the Soviet corn program must be considered to be more or less marginal lands.



In order to evaluate the corn program, studies on farm management covering parts or all of the states of Wisconsin, Minnesota, and the Dakotas must be made. In this area the production of corn for silage as well as for grain is important. In the USSR, much of the proposed corn acreage will be harvested for silage.

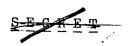
In the US as a whole, in recent years, the labor requirements per acre of corn have been more than three times the labor required per acre of wheat. In Wisconsin, Minnesota, and the Dakotas the production of corn for grain required 13 man-hours of labor and 8 tractor-hours per acre. Equally if not more important is the fact that corn growers used 14 short tons of manure and 138 pounds of commercial fertilizer per acre. Some areas also required varying amounts of lime.

The production of corn for silage required almost 15 manhours of labor and 10 tractor-hours per acre. Each acre also received an average of 15-1/4 short tons of manure and 169 pounds of commercial fertilizer.

Assuming that soils and climate are similar, the Soviet corn program, if it is to operate on a basis comparable with US performance, would require 780 million to 900 million man-hours, draft power equivalent to 480 million to 600 million tractor-hours, 760 million to 830 million metric tons of manure, and 4 million to 5 million metric tons of commercial fertilizer -- to say nothing of other farm equipment, cribs for storing corn, and silos for curing silage.* The availability of seed corn of any sort is also a real problem, and the development and production of sufficient hybrid seed for such an acreage are tasks that would require many years.

Soviet plans call for 275 centners of silage per hectare. This is 11 metric tons per acre, compared with the US national average of about 10 metric tons and that in the US north central states of from 5 to 6

^{*} It should also be borne in mind that in the USSR two or three times as much manpower is required to perform a similar farm operation as in the US. This would be especially true in the case of corn because of the lack of know-how on the part of Soviet farmers unfamiliar with corn culture.



metric tons per acre. It must be remembered that the latter obtained only through the generous application of manure and lizer, two items which are unlikely to be available to the S farmer in any appreciable quantities.

It is likely that without major inputs of lime, and fertilizer, average Soviet yields of silage corn may be than the announced 1954 state-farm average of only 80 centne hectare (c/ha) instead of the present planned 275 c/ha. At c/ha the fodder units per hectare, according to Khrushchev's will be no more than that obtainable from an oat yield of 11 even considering the full value of both the oat grain and the Furthermore, the labor, machinery, and material input for the would be significantly greater.

It is extremely doubtful that within the 1955-60 the corn expansion program will produce a significant increme hectare above that already being produced on the same land. fact, it is not improbable that the whole program will fall disrepute along with the previously abandoned projects such a grass rotation program in dry areas.

4. Livestock Program.

The ultimate goal of the corn program is, of cour increase livestock production and thereby to increase the surmeat and milk. Without an increase in the supply of feedstuil livestock program cannot be fulfilled. Assuming, however, the major part of the feed program is carried out, some increase and milk can be achieved, but it is difficult to see how the stock and meat goals set by the government can be attained.

The plan for pork production, for example, calls centners per 100 hectares of arable land, about 27 pounds per Pork production in the US in 1952 totaled 11.5 billion pounds an arable land or crop acreage of about 409 million acres. I is equivalent to an average of about 28 pounds of pork per ac and in doing this the US utilized about 90 million acres of t best corn-growing land in the world.



II. European Satellites.

A. General.

The European Satellites, as indicated by information available as of 15 June 1955, are once more facing the prospects of a below-normal harvest. This is largely a result of spring weather conditions unfavorable for the seeding and development of crops. Rumania and Bulgaria are the only European Satellites for which the 1955 outlook indicates a slightly better grain harvest than in 1954 -- primarily the result of an expansion of breadgrain acreage.

An early spring would have enabled an increase in the cultivated area in the European Satellites, and an increase in spring sowing would have made up for unfulfilled fall sowing plans for wheat, rye, and barley, but there was a 3- to 4-week delay in starting field operations. This delay resulted in nonfulfillment of spring planting plans. Cool weather has prevailed through 1 June, retarding growth and development of spring crops and delaying harvests. Despite efforts to increase mechanization and farm labor, there has been only limited success. It is likely, therefore, that the shorter harvesting period and the lack of machines and men to achieve a timely harvest will result in above-normal harvesting losses and will reduce total production.

The capability of the European Satellites to effect a significant increase in agricultural production during the next 5 years (through 1960) is very unlikely under present policies. Although there has been, and probably will continue to be, a substantial increase in investments devoted to agriculture as a means of increasing crop yields and animal productivity, the all-important role of the peasant will determine the effectiveness of these investments. Despite an initial liberal approach to collectivization with the announcement of the "new course," recent speeches indicate that a shift to pre-"new course" collectivization policy is occurring, with officials stating that complete socialization is the final objective. As long as this remains the policy, the peasant will not have the incentive to increase production -- as has been so well proved in the USSR. Low productivity in agriculture, one of the most important sectors of the economy, will continue to plague the European Satellite governments for many years to come.



B. Weather and Crop Conditions.

l. Albania.

Agricultural production in Albania in 1955 probably will be somewhat lower than in 1954, which was a relatively good year.

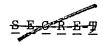
According to reports by the Ministry of Agriculture, the plans for sowing grain in the fall of 1954 for harvest in 1955 had been fulfilled 102 percent. 12/ The greater portion of the fall-sown crops is wheat, and it is estimated that the area sown to wheat in 1955 was approximately 10,000 hectares greater than that of 1954. There are indications, however, that this increase was made at the expense of the spring-sown crops -- corn and spelt. 13/

Reports indicate that in the spring sowing program there have been failures which can be attributed partially to above-normal dry weather in the spring and lack of organization on the part of the Machine Tractor Stations. 14/

Government plans for 1955 call for a 25-percent increase in wheat production over that of 1954, a 45-percent increase in corn, a 61-percent increase in cotton, a 102-percent increase in sugar, and a 12-percent increase in tobacco. 15/ Because there is only a 10-percent increase over 1954 envisioned for the total sown acreage, 16/ it is to be assumed that increases in production are to be achieved by increased yields.

Under favorable weather conditions, a slight increase in wheat production may be attained in 1955, but corn and industrial crops probably will remain static or -- if dry weather continues to persist -- may be less than in 1954.

Plans for 1955 and the projected output for 1960 indicate a continuing emphasis on agricultural production. The recently announced investment program for 1955 implied a 35-percent increase over 1954. A large portion of this increase undoubtedly will go into land reclamation and irrigation. The long-term outlook for Albania, barring peasant resistance, indicates an increase in the contribution of agriculture to the total national income. The strongest factor



favoring a dynamic growth is the reserve of land still available for exploitation. Continued investments for reclaiming this land and the introduction of new techniques, education, and acquired skills of mechanized farming could improve the situation.

2. Bulgaria.

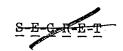
There are indications that 1955 over-all agricultural production in Bulgaria will be somewhat greater than that of 1954. Seeding of grain crops in the fall of 1954 for harvest in 1955 apparently was completed in November, about 1 month later than planned, 17/ but the winter was mild and wet, and the early spring condition of fall-sown crops was good.

Because of an early spring, 1955 field work was advanced, relative to the same period in 1954. In spite of this, the press has criticized failures to meet time schedules for the sowing of early-and medium-ripening grains. Above-normal precipitation during March delayed planned schedules and encouraged weed growth but was favorable to the development of pastures. Cool weather in early spring and below-normal rainfall during April and May possibly retarded rapid growth in the north, but by June the harvesting of early grain crops was in progress in the southern part of Bulgaria. 18/

Government planning for 1955 indicates an expected gross production approximately 21.7 percent greater than that of 1954. 19/ A larger share of the increase is to result from an expanded livestock program. Some increase in yields of the major crops is planned, but otherwise there has been no indication of a change from the past crop patterns -- except an expansion of perennial fodder grasses, which is in line with the current emphasis on expanding the livestock industry. 20/

Planned investments in agriculture during 1955 are expected to be 50 percent greater than during 1954, with a proportionately larger share going into the lagging livestock industry and afforestation programs.

Long-term planning in Bulgaria through 1957 shows the greatest effort being directed toward increasing livestock numbers and related products. Because of the existing low ratio of pasture



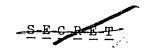
availabilities to planned numbers of livestock, modified goals have been projected. The dynamic planned growth of livestock numbers is further hampered by the relatively rigid and inflexible pattern of food and forage crops. With such limitations, it is not expected that any acreages taken out of food crops will be able to supply the additional feed required for carrying larger numbers of livestock.

Preliminary production estimates tend to favor a slight increase over 1954 grain and potato production and possibly heavier slaughter weights for livestock. The situation of industrial crops indicates a static level of production. Although the over-all agricultural production in Bulgaria in 1955 probably will be greater than in 1954, the planned increase of 21.7 percent is unrealistic.

3. Czechoslovakia.

The present outlook for agriculture in Czechoslovakia for 1955 indicates that the over-all production may not be any better than the below-average production in 1954. Despite significant increases in agricultural investments during 1954 and those planned for 1955, weather and peasant apathy are once again working counter to the desires of the government.

The failure of the fall agricultural campaign was well summed up by Prime Minister Siroky when he stated on 11 February 1955 that despite favorable weather conditions the farm work in the autumn of 1954 was not completed. Sowing of grain in the fall of 1954 for harvest in 1955 was greatly delayed, and the plan for increasing the acreage of arable land was not fulfilled. 21/ The failure to fulfill fall work plans is further confirmed by the fact that, according to the Czechoslovak Minister of Agriculture, only 67.3 percent of fall sowing operations was completed by 25 November 1954, the established deadline. 22/ In addition, fall plowing by the Machine Tractor Stations was fulfilled by only 71.4 percent by 5 December 1954. 23/ Adverse weather during December prevented further field operations, and both sowing and fall plowing plans were drastically underfulfilled.



An early spring would have enabled farmers to increase spring grain acreage, but there was a late spring, and the start of spring field operations was delayed by nearly 30 days. 24/ As a result, an abnormally larger amount of work had to be performed in a shorter period of time. It is estimated that because of this situation the sowing plans for grain, potatoes, and sugar beets were not fulfilled.

The entire spring has been characterized by below-normal temperatures and inadequate sunshine, and the development of spring-planted crops has been retarded. Field observers reported near-freezing temperatures in the northern half of Czechoslovakia and heavy frost as far south as Roznava as late as 18 May. 25/

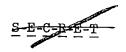
The late spring means that the harvest of field crops will have to be performed in a shorter than normal period of time, as was the situation in 1954. In view of inadequate farm mechanization and labor shortages, high harvesting losses may result.

Unless exceptionally good weather prevails, the prospect for any increase in agricultural output, especially of field crops, over the low 1954 level is unlikely. Planned increases 26/ in yields per hectare of 20 percent for grain and more than 30 percent for oil crops will definitely not be attained.

In 1955-56, Czechoslovakia, a food-deficit country attempting to increase its level of self-sufficiency as part of the "new course," will once again be dependent on imports for a significant share of the food requirements of the urban population. Because of the low agricultural production in 1954, coupled with insufficient food imports during 1954-55, Czechoslovakia is closing the consumption year ending 30 June 1955 with a shortage of food supplies.

4. East Germany.

Present indications are that the 1955 over-all agricultural production in East Germany may be lower than that of the poor 1954 crop year. Any drop below the 1954 level would make even more critical the present low availability of food.



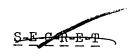
Although rather favorable weather prevailed in East Germany during the fall of 1954 for the seeding of grains to be harvested in 1955 (winter grains), it is probable that plans were not fulfilled 100 percent for wheat, barley, or oilseeds. The Ministry of Agriculture and Forestry announced that as of 6 December the sowing of winter wheat was 93.3 percent completed. 27/ No mention of barley was made, which could be interpreted as indicating an unsatisfactory situation. It is likely that above-normal precipitation prevented the seeding of grain any later than 10 December. Seeding of winter rye was claimed to have been fulfilled by 96.5 percent 28/ as of 3 November, and, therefore, the plan probably was fulfilled. The 1955 plan, however, calls for about 150,000 hectares less area devoted to rye than was sown in 1954. 29/

The mild winter and above-normal precipitation gave winter grains a good start. Contrary to the situation in 1953-54, when high losses occurred as a result of winter kill, there was no evidence of winter kill this year. In March 1955 it was estimated that winter grain and forage crops looked better than they did a year ago. 30/

Above-normal precipitation and below-normal temperatures during February, March, and April delayed spring field operations by some 3 to 4 weeks. 31/ This meant that an above-normal amount of field work had to be done in a short period -- at a time when the government was demanding a 15-percent increase in field crops. 32/ It is doubtful that spring planting plans were fulfilled. One source claimed that only a few Agricultural Producers' Cooperatives fulfilled their spring plans. 33/

Another problem in spring planting in East Germany was the shortage of seed. It is not known how serious the situation was, but the agricultural press admitted that difficulties may arise in the planting of oats, barley, and potatoes. 34/

The weather during May and the first 10 days of June has been cold. This has delayed both planting and development of spring crops (particularly vegetables) throughout East Germany. As a result the entire harvest season will be later than usual, causing an overlap in harvesting of different crops. With the inadequate mechanization and labor shortage in agriculture, this could mean high harvesting losses.



Unless there is warm weather and more sunshine, yields of crops may be less than in 1954. It is believed, however, that total production of grains will be more than in 1954 because of less loss of acreage from winter kill in 1955 and good soil moisture reserves. Production forecasts for potatoes, sugar beets, oil crops, and the like are premature at this date, but, assuming normal weather from 10 June to the harvest of these crops, production could be expected to approximate 1954 levels. With more normal temperatures and sunshine, yields of forage crops should be above average.

5. Hungary.

The over-all agricultural production in Hungary in 1955 probably will be unsatisfactory even though it will be somewhat larger than in 1954, a drought year. The outlook for 1955 is that the government's planned increase in production of 7.3 percent over 1954 probably will not be realized. 35/

Following in the wake of the serious decline in grain production in 1954, the government announced its plan for sowing almost 2 million hectares in the fall of 1954 for harvest in 1955, an expansion of 300,000 hectares over the previous year. 36/ Reports as of March 1955 indicate serious shortcomings in the fulfillment of this plan, especially in the private farming sector. 37/ These shortcomings are primarily the result of poor operation of the Machine Tractor Stations, even though their equipment had been increased during the year.

On the whole, the crops sown in the fall of 1954 weathered the winter without serious damage. There were some reports of severe freezing, but apparently the proportion of winter kill was not greater than normal.

A late and wet spring has caused additional delays in field work, and the sowing of spring fodder crops was reportedly unsatisfactory. In addition, a shortage of spring wheat seed prevented the peasants from filling gaps left by underfulfillment of fall sowing plans. 38/

Field work was hampered by cold weather in March and excessive rain in April, and the development of both fall- and spring-sown grains has been retarded by the continuing cold weather persisting throughout Hungary. The below-normal precipitation in May has delayed the development of corn, particularly.



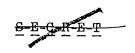
After the devastating experience in the agricultural sector in 1954, the Hungarian government has allocated to agriculture 26.2 percent of all budgetary investments in 1955. 39/ This artificial stimulant comes too late, however, to offset the depressing effects of the extremes of weather and the underfulfillment of plans because of organizational difficulties. As of early June, the outlook for the 1955-56 food supply, although slightly better than that of 1954-55, is unsatisfactory, and it may become worse.

6. Poland.

Indications are that 1955 over-all agricultural production in Poland will about approximate that of 1954 and that the 6.2-percent increase planned for 1955 $\frac{1}{40}$ probably will not be achieved.

This generally unfavorable outlook in Poland is, in part, the result of failure to fulfill the plowing and sowing plans in the fall of 1954 for seeding and harvest in 1955. 41/ Failure to fulfill these fall plans, in turn, has increased the workload in the spring, thus reducing the probability of fulfillment of ambitious spring sowing plans. Over 60 percent (9 million hectares) of Poland's arable land was to be sown in the spring of 1955, and, in addition, 160,000 hectares of fallow land were to be put into cultivation. 42/ In view of the chronic inefficiencies of the Machine Tractor Stations -- especially low tractor productivity, which was largely responsible for the nonfulfillment of plans in the fall of 1954 -- it seems unlikely that spring sowing operations were fulfilled. Furthermore, bad weather in March and April delayed sowing operations as much as 3 weeks, 43/ and lagging sowing plans were severely criticized in the Polish press as recently as early May. 44/

Although favorable weather conditions prevailed throughout most of May, plant growth was set back in late May and early June by a cold spell which in some regions resulted in killing frosts. In many areas, grains seeded in the fall of 1954 for harvest in 1955 (winter grains) were underdeveloped, and planting of potatoes was still in progress in early June. 45/ This increased the necessity for favorable weather conditions throughout June and July to insure a fair crop.



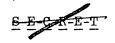
The chief tasks of the Polish agricultural program in 1955 include increasing agricultural production by expanding the sown area and increasing the yields per acre. Considerable expansion of the socialist enterprises -- collective and state farms -- is also contemplated, although government hopes of increasing the socialist sector by 3,000 units annually in 1954-55 are well behind plan. 46/ It is precisely these socialist enterprises, however, which are the greatest laggards in fulfilling government plans.

The 1955 agricultural program is to be financed by an allocation of 12.1 billion zlotys from the Polish budget, an increase of 21.8 percent over the allocation in 1954. 47/ As mentioned above, 160,000 hectares of fallow land were to be put into cultivation during 1955 as part of the government's long-range plans to increase the arable land. Inputs of fertilizers during spring sowing alone were to increase by 130,000 metric tons over 1954. 48/ It is unknown whether or not these inputs were realized, but general availability of fertilizers should be greater than in 1954 because of expansion of fertilizer production in the newly opened Kedzierzyn plant and the expansion of the Cherzow and Tarnow plants. 49/

Increases in livestock numbers have been noted. Because of the emphasis on livestock production as well as increased per capita human grain consumption, 50/ however, Poland has become a grain-deficit country and has had to resort to imports to supplement domestic production. In the past 12 months, Poland imported almost 1 million tons of grain from non-Bloc countries. 51/ In view of present conditions, it seems likely that grain production in 1955 will be no greater than the 11 million tons produced in 1954. 52/ In that case, Poland will have to continue to import grains to support the present livestock development program and to maintain the present human consumption pattern.

7. Rumania.

The over-all agricultural production in Rumania in 1955 probably will be somewhat greater than that of 1954. In the fall of 1954 some 3.4 million hectares (chiefly wheat and rye) were seeded for the harvest of 1955. This was approximately 300,000 hectares more than was seeded in 1953 for harvest in 1954. 53/



Because of more favorable weather, a larger amount of field work was performed during the fall of 1954 than during the fall of 1953. The winter was relatively mild, with conditions about normal, and fall-sown crops wintered well. Ground moisture was considerably increased by above-normal precipitation during the fall and winter months.

Spring field work and sowing were delayed, however, because of cold weather and continuous rains during March and the beginning of April. 54/ Because of reported better organization of Machine Tractor Stations and the increase of other farming equipment, a greater part of the spring work was completed before the end of April. 55/ The rapid development of weeds necessitated extra work in corn fields, but up to June the development of small grains was satisfactory. Favorable weather in May helped the rapid development of wheat, rye, and barley, 56/ and abundant ground moisture has given a good start to the corn crop.

The announced government program to increase agricultural production in 1955 made specific reference to grain production as the most important factor in agricultural development. The 1955 plan calls for a grain production of 10 million metric tons, of which 60 percent is reflected in the expanded corn program. The 1954 grain crop was estimated at 6 million metric tons. 57/

The acreage of grain has been slightly expanded, and weather conditions up to June have been favorable. The prospects for the 1955 grain harvest indicate a somewhat better crop than in 1954, but the planned figure of 10 million metric tons of grain in 1955 is unrealistic.

C. Outlook for Agricultural Production.

One important problem that the European Satellites have in common is their low agricultural production. This problem was brought to the attention of the world with the announcement of the "new course" policy measures in the summer and fall of 1953. These announcements stressed the fact that agricultural production had not attained prewar levels and in some areas was in a state of decline. Two major reasons were given -- directly, the inadequate agricultural investments, and, indirectly, the collectivization program.



Investments were immediately increased for agriculture, and increases have continued into 1955. The investments have primarily been channeled into machinery, fertilizer, buildings, and livestock. As in the past, the socialized sector was favored.

The collectivization program, which temporarily came to a halt in some countries and was slowed down in others, was revitalized in the last half of 1954. Propaganda and possibly economic pressures are once again being applied in the countryside in order to increase the membership of the collectives. Each of the European Satellite governments has announced that eventual socialization of agriculture is the answer to increasing both agricultural production and procurement of farm produce.

One incentive which the European Satellite governments thought might raise agricultural production and help them procure a larger share of the production was an increase of the peasants' supply of manufactured consumer goods. In 1954, production in light industry was emphasized, and there was an increase in the supply of consumer goods to the rural areas. The increase, however, was not enough to effect an increase in either production or procurement of agricultural products in 1954. As of 15 June, no appreciable increase over 1954 is foreseen in the 1955 availability of manufactured consumer goods for the countryside. This will mean a continued shortage of incentive consumer goods that might at least cause the peasant to market a greater share of his production.

On the basis of these facts, it is estimated that no significant increases in agricultural output (especially livestock) will take place in the European Satellites during the next 5 years -- to the extent that prewar levels will be attained -- other than what may result from excellent weather in any one year.

The Communists have failed to consider the importance of the human element in agricultural production. As long as the peasant knows that he will eventually have to give up his land and join a collective, there is no incentive for him to make the increased investments in his farm necessary to raise crop yields and animal productivity. A similar situation prevails in the socialist sector, where the collective and state farm members do not have the personal interest in the tending and caring for field crops and livestock, and the result is lower



production than on privately held land. This has been proved by Soviet experience. Therefore, should there be a drive toward complete collectivization of the European Satellite farmers, or at least a reversion to the pre-"new course" collectivization policy, agricultural production could well decline. In any event, it is estimated that the European Satellites, in total, will not be able to increase agricultural output at a rate higher than that of the increase in population and that they will not attain prewar levels of production by 1960. Under present Communist policies the problem of trying to establish an agricultural production base adequate to meet requirements will be with the European Satellites long after 1960.

III. CommunistaChina.

Communist China is faced with new agricultural setbacks which threaten the industrial development and military modernization programs. To counter these threats and to maintain exports of foodstuffs, the Communist regime has been tightening controls over food consumption in both rural and urban areas. Some open unrest resulting from these measures has been reported.

The production outlook for the early crops being harvested in June in most of Communist China is poor, but the harvest will relieve somewhat the general food shortage and the starvation prevalent in certain localities.

The crops sown last fall, which are about to be harvested, normally constitute about 30 percent of Communist China's annual food output. These crops have been hit by a series of disasters -- planting problems caused by undrained land, 58/ other aftereffects of last summer's disastrous floods, 59/ a severe winter, 60/ and the spring drought which has affected all of China except Manchuria and the Yangtze Valley. 61/

The Chinese Communist press has already conceded that in the North China plains, a major wheat-producing area, there have been losses to the wheat crop as a result of the drought. 62/ The drought in the South China province of Kwangtung is said by Communist sources to have been the most severe in more than 90 years. 63/ The food situation there is expected to remain critical until after the late summer rice harvests. 64/ Meanwhile, thousands of refugees and destitute farmers are reportedly fleeing to Macao and Hong Kong. 65/



As yet there has been no announcement of mitigation of agricultural taxes in kind or of quotas for peasants' forced sales, both of which are set on the basis of norms. To combat the condition of general scarcity, the Chinese Communist government, which controls the distribution of most of the country's food, has intensified the austerity campaign by reducing allocations to both rural and urban markets late this spring. 66/ In recent months, rationing in cities, first adopted on a wide scale last year, has been extended to more items in more areas. 67/ Recently adopted urban austerity measures appear designed to reduce the food rations of population groups less favored by the regime. 68/

Another government action taken this spring to cope with agricultural problems has been the strengthening of the Party Cadres, the real rulers of rural China. 67/ This effort to increase Party control over the peasants probably indicates that immediately after the 1955 fall harvests there will be stricter procurement policies and a renewed drive for the development of Agricultural Producers' Cooperatives, an elementary form of collective.

To cope with food riots in the starvation areas and with other manifestations of hostility, the Chinese Communist regime apparently has strengthened security forces in the countryside. Communist control of any appreciable area, however, apparently has not been seriously endangered.

Because of the disastrous 1954 floods in the Yangtze Valley, China's "rice-bowl" area, this year's planned exports of rice to Ceylon -- about 300,000 metric tons -- have been coming from Canton, 70/ despite the critical food situation in South China. Rice exports from South China to Macao were increased in late 1954, and exports to Hong Kong were resumed in early 1955 after an interval of several years. 71/ Moreover, the Chinese Communists continue to ship rice to the USSR. The Communist regime has contracted to buy from Burma this year 300,000 metric tons of rice, which will offset part of the Chinese Communist rice exports.

The Chinese Communists have often publicly expressed their determination to export foodstuffs to pay for industrial imports. 72/ They are expected to try to maintain net exports at the level of previous years.



The Communist regime has announced a 1955 food target calling for an increase of 6 percent over last year's production. 73/ This goal may not be reached unless the fall harvests are larger than normal. As has happened in all other years since the Communists came to power in 1949, food production on a grain equivalent basis again may fail to reach the average output of the prewar years from 1931 to 1937.

These failures, reminiscent of the difficulties experienced in the USSR during the early years of Soviet economic development, appear to have been a principal factor behind the acceleration of socialization and state controls and the adoption of increasingly harsh austerity policies in Communist China during the past 2 years. The peasant hostility aroused by the regime's actions is regarded by some observers 74/ as constituting a major potential source of instability -- unless, of course, the regime chooses to moderate its policies at the expense of the current rate of industrial and military development.

There are no indications, however, that the regime is inclined toward such a major shift in its planning. Recent official statements indicate that the Communist regime now recognizes that the rise in food output during the first two Five Year Plans (1953-62) will be limited because of the low priority assigned to allocation of investment resources to the agricultural sector of the economy. The Communist regime has clearly abandoned hopes expressed early in the First Five Year Plan for an increase of as much as 70 percent in food output by 1962.

Actually, during the first two Five Year Plans the rise in food output probably will not exceed 9 or 10 percent and may be much less. 75/Estimated population growth during this period will almost certainly keep pace with the rise in food production. After that it will be impossible to maintain an equilibrium without substantial inputs of fertilizer.

The two principal means of achieving agricultural increases in China -- the application of chemical fertilizer and the opening up of new land with mechanized equipment -- will not be attempted on a large scale until the Third Five Year Plan (1963-67), according to a March 1955 76/ report by the Minister of Agriculture to the State Council.



It is estimated that the supply of chemical fertilizer in Communist China will rise from about 500,000 metric tons in 1953 to only 1 million metric tons in 1960. At least 10 million to 15 million metric tons are needed to achieve significant crop increases. 77/

A modest plan to expand acreage during the next 5 to 7 years was recently announced. The plan envisages the addition of only 6 percent to Communist China's present cultivated acreage. 78/

Meanwhile, Communist China plans to concentrate on expansion of irrigation and water conservation works as its main effort to expand food output, and modest increases can be expected from this program. 79/

In view of these unfavorable long-range prospects the rising needs of the regime for foodstuffs are to be met by an accelerated drive to increase in several ways the regime's control over agricultural output. These unfavorable agricultural prospects, the drive toward socialized farming, and other harsh rural policies of the regime have led some observers to conclude that during the first two Five Year Plans there is in Communist China a reasonable possibility of a peasant reaction similar to that of an important portion of the peasants in the USSR during its First Five Year Plan. 80/ Neither this possibility nor that of a more open peasant revolt appears to worry the Communist regime, which has already developed effective security controls in the countryside.

Unless such a serious reaction occurred, agricultural failures probably would have no great effect on Chinese Communist military plans. The worst food situation in the regime's history occurred in early 1950. Later in the year the Chinese Communists intervened in Korea. The food situation remained poor but was slowly recovering in 1951 and early 1952 when the Chinese Communists committed and supplied some 700,000 Chinese Communist troops in the Korean War. 81/

SECRET

JAPPENDIX

SOURCE REFERENCES

Evaluations, following the classification entry and designate "Eval.," have the following significance:

Doc. - Documentary A - Completely reliable B - Usually reliable C - Fairly reliable D - Not usually reliable E - Not reliable C - Cannot be judged Information 1 - Confirmed by other sources 2 - Probably true 4 - Doubtful 5 - Probably false 6 - Cannot be judged

Evaluations not otherwise designated are those appearing on the cited document; those designated "RR" are by the author of this re No "RR" evaluation is given when the author agrees with the evaluation on the cited document.

^{1.}

^{2.} lbid.

^{3.} Selskoye khozyaystvo, 14 Oct 54, U. Eval. RR 2. Sovkhoznaya gazeta, 17 Oct 54, U. Eval. RR 2.

^{4.} Pravda, 21 Jan 55, U. Eval. RR 2.